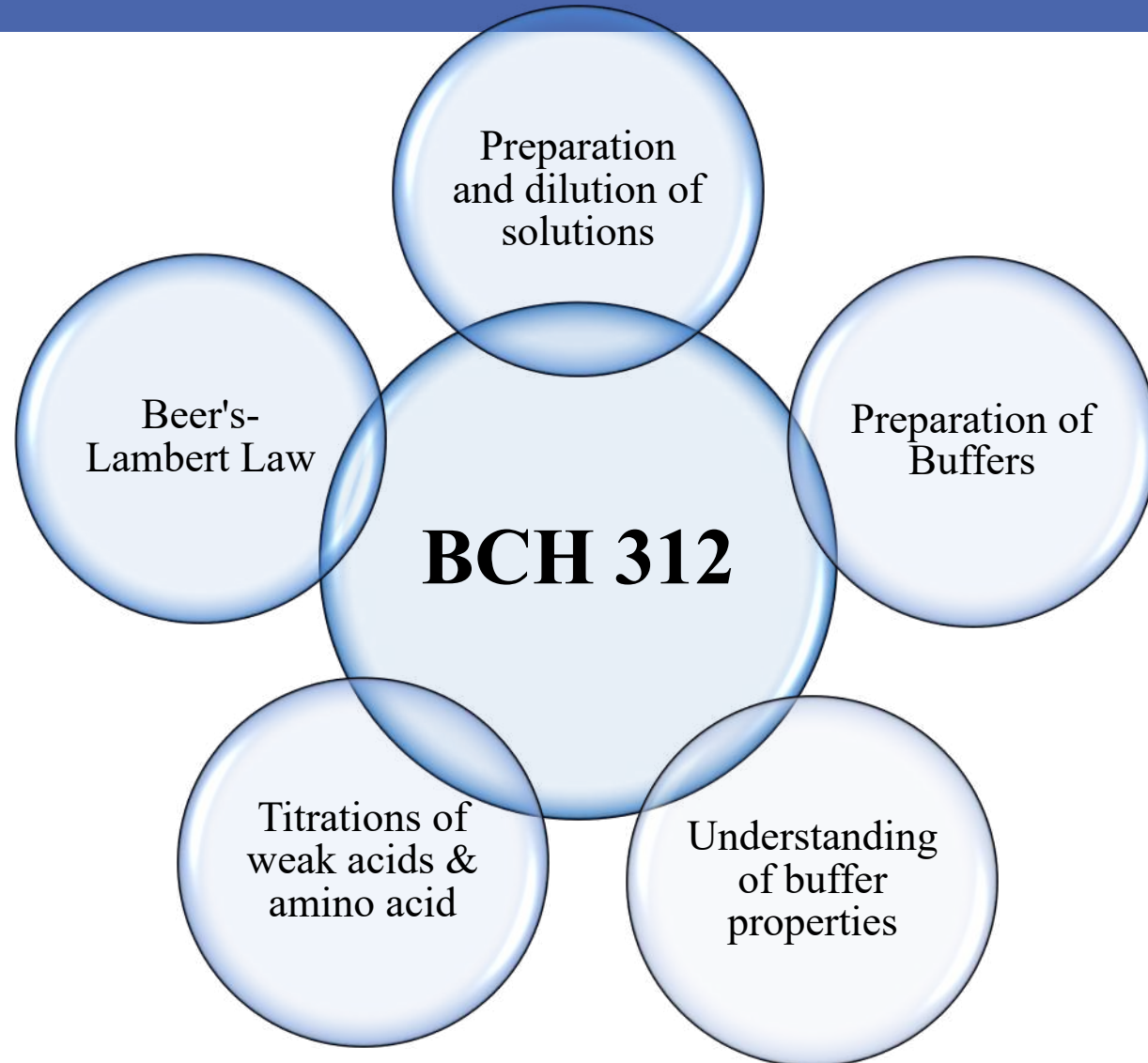


# Introduction and lab safety

# Mark Distribution:

Evaluation	Marks
Quizzes	5 Marks
Lab Report	4 Marks
Lab performance	1 Mark
HomeWorks	2 Marks
Final Exam (May 7th, 2024)	13 Marks
Total	25 Marks

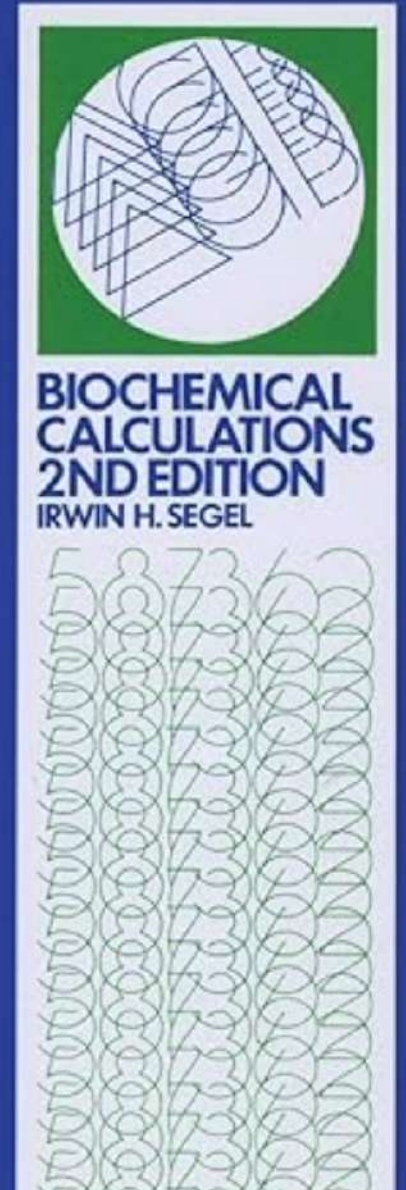
# Course Outline:



# Course Reference:

Segel, I. H. (1968, January 1). Biochemical Calculations. John Wiley & Sons.

<https://www.dropbox.com/s/j3yi4k0aj9xkzko/%40biochemical%20calculation.pdf?dl=0>



# Writing a Report:

## ⇒ 1<sup>st</sup> Writing style:

Font: Times New Roman. Size: 12 for text and 14 for subtitle. The space between line is 1.5. The text must be justified.

## ⇒ 2nd Report content:

### 1. Cover page

Logo of uni. & dep. – report title – course name and code – students names – date of submission.

### 2. Table of content



كلية العلوم  
قسم الكيمياء الحيوية

King Saud University  
College of Science  
Department of Biochemistry

**Title of the experiment**

**BCH 000**

Prepared by:

Name 4411111

Name 4411111

# Writing a Report:

## 3. Introduction

A background that helps to understand your topic should be written. The information in the introduction must be cited.

## 4. Objective/s

Write it using your own words, make it specific.

## 5. Materials and methods

As in the lab-sheet

### Introduction

migration rate of RNA through agarose gels depends on the following parameters: size of the RNA molecules, the concentration of agarose gel, and voltage applied [7].

### References

7.

Surzycki, S., *Basic Techniques in Molecular Biology*. 2000, New York: Springer.

# Writing a Report:

## 6. Results

You should report all the results that you get from your experiment. Any tables, figures or calculations. You MUST write the Legend of tables and figures as shown below

## 7. Discussion

You must write a description and reasons for why you got your results.

## 8. References

**Table number**



**Table 2.** Effects of Lipofundin 20% on hepatic lipid peroxidation biomarkers.

Biomarkers	Control group	Lipofundin group
MDA ( $\mu\text{mol/L/mgPr}$ )	$3.89 \pm 0.75$	$7.63 \pm 0.31^*$
TH ( $\mu\text{mol/L/mgPr}$ )	$35.27 \pm 4.22$	$67.32 \pm 5.89^*$
PP ( $\mu\text{mol/L of MDA/mg Pr}$ )	$5.06 \pm 0.48$	$9.74 \pm 0.42^*$

**Table legend**

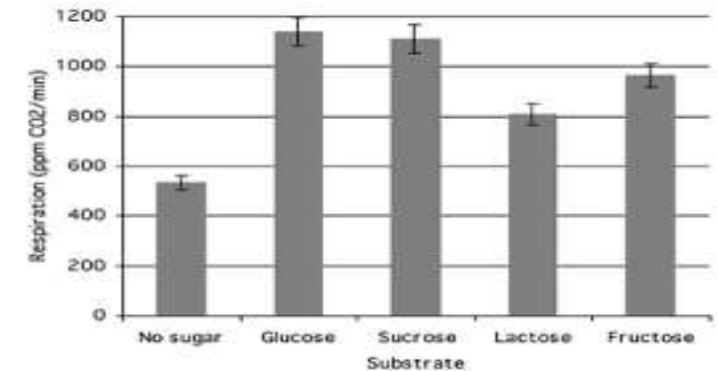


Figure 1. The Effect of Substrate on Yeast Respiration.



**Figure number**



**Figure legend**

# General Laboratory Safety

- You.
- Other lab workers and visitors.
- Your work.



# General consideration:

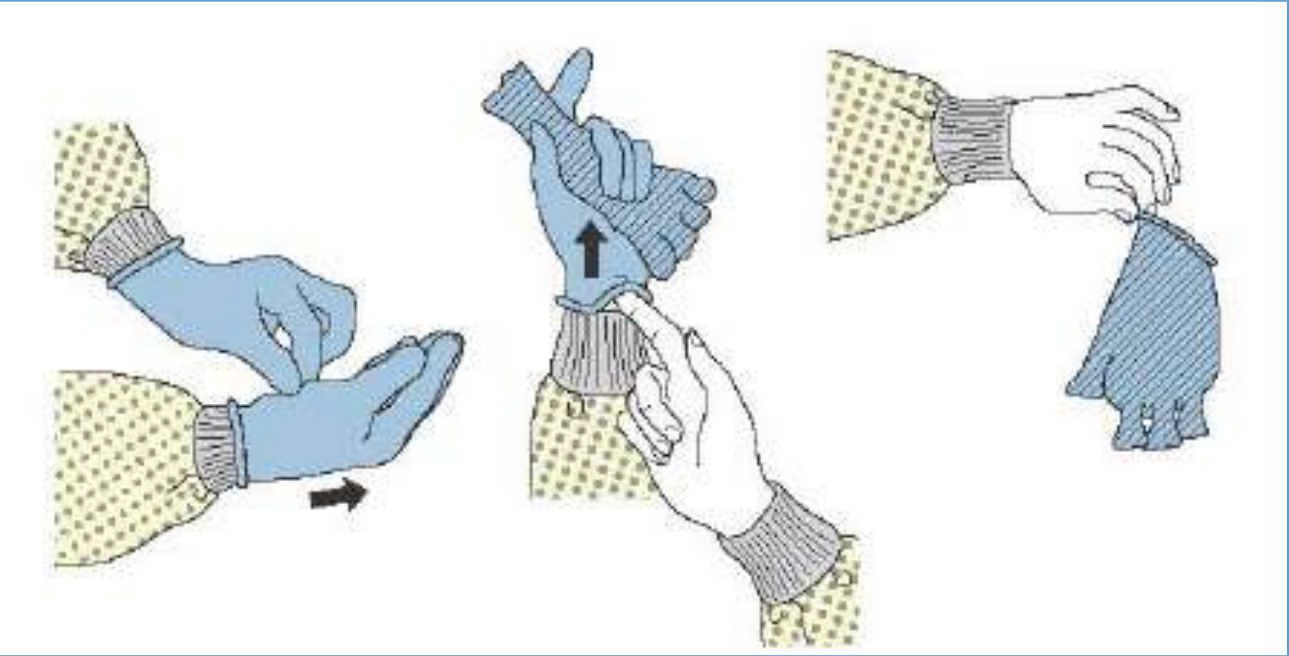
- Never **eat, drink** or chew gum in the lab.
- Do **not** taste, smell or touch any chemical.
- Tell your instructor about any accident.
- Tie your hair before experimenting.
- Closed-toed shoes should be worn at all times.
- Wash your **hands** with soap after an experiment.
- You must know all exits in your lab, eye washer, and fire extinguisher, first aid kit.
- Do **not** touch any electrical sources.



# General consideration:



## How to remove gloves



# General consideration:

## Before starting the experiment:

- Before starting working, be sure to label the glassware.
- Glassware should be cleaned before use.



## After finishing the experiment:

- After finishing the experiment turn off all the equipment, and clean your work bench.
- Glassware must be cleaned and kept back in the proper place.



# Dealing with chemicals

- Consider all chemicals to be hazardous.
- Know what chemicals you are using and notice the **hazard symbols**.
- Carefully **read the label** twice before taking anything from a bottle.
- **Never point** a test tube that you are heating at yourself or your neighbour.
- You must work at the **hood** when dealing with a chemical with fumes.
- If chemicals come into **contact with your skin** or eyes, **flush** immediately with water and consult with your instructor.
- Always pour acids into water. If you pour water into acid, the heat of the reaction will cause the water to explode into steam.
- Do not forget to **label your tubes** before starting the lab.
- **Close** all chemical bottles after finishing
- Dispose of chemicals properly.



# Hazard symbols:

## SAFETY PRACTICES



Flammable



Harmful /  
Irritant



Corrosive



Poison /  
Toxic



Explosion



Biohazard



Oxidizer



Environmental  
Hazard



Radioactive